Missouri Department of Natural Resources

Total Maximum Daily Load Information Sheet

West Yellow Creek

Water Body Segment at a Glance:

Counties: Sullivan, Chariton and Linn
Nearby City: Brookfield
Length of impaired segment: 43 miles
Pollutant: Low Dissolved Oxygen.
Source: None Given
Water Body ID: 0599


State Map Showing Location of Watershed

Scheduled for TMDL development: 2016

Description of the Problem

Designated beneficial uses of West Yellow Creek[1]

- Livestock and Wildlife Watering
- Protection of Warm Water Aquatic Life
- Protection of Human Health (Fish Consumption)

Use that is impaired

- Protection of Warm Water Aquatic Life

Standards that apply

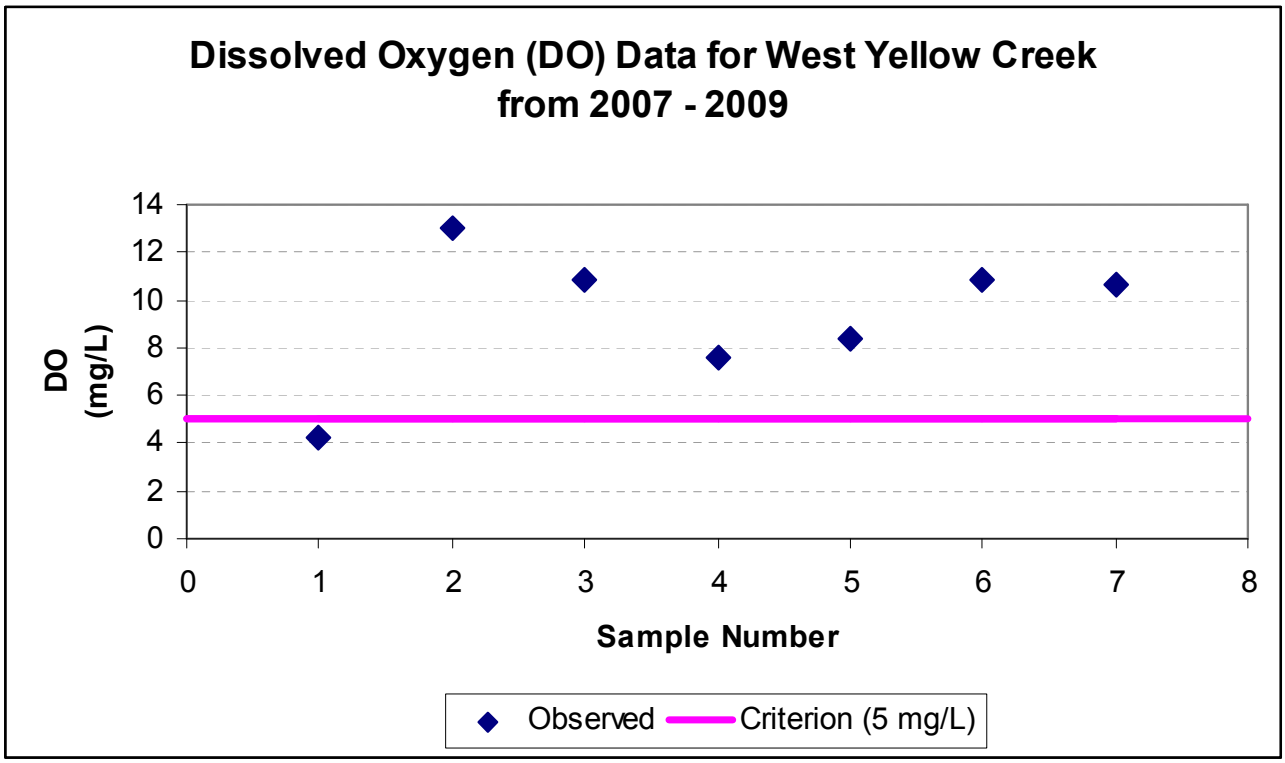
- In the Missouri Water Quality Standards, found in 10 CSR 20-7.031 Table A, the criterion for dissolved oxygen, or DO, in streams is a minimum of 5 mg/L (milligrams per liter or parts per million).

Background Information and water quality data

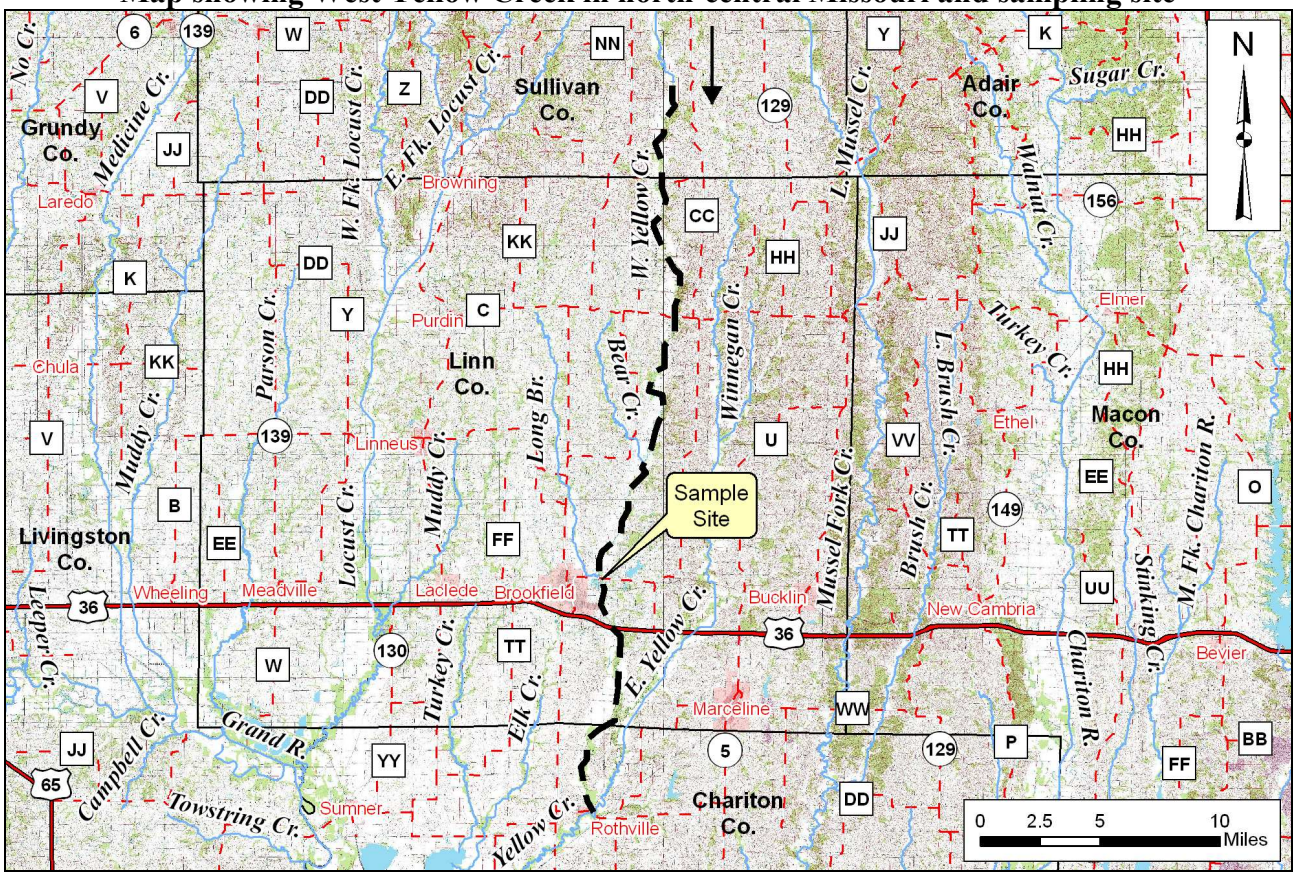
West Yellow Creek is a rural stream that flows south to join East Yellow Creek in northern Missouri. They are in the Grand River watershed. The low dissolved oxygen impairment is based on data collected by the department from 2007-2009.

[1] Presumed uses. Due to an oversight, this water body is currently not listed in state water quality standards and has no beneficial uses designated.

Water quality conditions in West Yellow Creek are not protective of aquatic life, as they do not meet the dissolved oxygen criterion. Dissolved oxygen is important as many aquatic organisms require high levels of oxygen to survive. For dissolved oxygen, if more that 10 percent of measurements in a water body fail to meet the water quality criterion, that water body is judged to be impaired. In the case of West Yellow Creek, one of seven samples (14.2 percent) did not meet the water quality criterion. While it is not known exactly what is causing the dissolved oxygen to be low, the usual suspects are excessive nutrients and sediment. In a rural setting nutrients come from fertilizer, both commercial and manure, leaking septic systems and "direct deposit" from animals (both domestic and wild) defecating in the stream. The sediment can come from runoff from unvegetated fields and construction sites and erosion from inadequately protected riparian, or buffer, zones along creeks.



Map showing West Yellow Creek in north-central Missouri and sampling site



Sample Site
W. Yellow Cr. at State Highway 11

For more information call or write:
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